RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/538,530
Source: IFW16
Date Processed by STIC: 2/22/06

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IFW16

RAW SEQUENCE LISTING DATE: 02/22/2006
PATENT APPLICATION: **US/10/538,530** TIME: 12:11:07

Input Set : **A:\MBP-017xxSeqList.txt**
Output Set: **N:\CRF4\02222006\J538530.raw**

<110> APPLICANT: Reski, Ralf
Decker, Eva
Justine Kiessling

<120> TITLE OF INVENTION: FtsZ-POLYPEPTIDES AS A TARGET FOR HERBICIDAL COMPOUNDS

<130> FILE REFERENCE: MBP-017XX

<140> CURRENT APPLICATION NUMBER: US 10/538,530
<141> CURRENT FILING DATE: 2005-06-10

<150> PRIOR APPLICATION NUMBER: PCT/EP2003/014162
<151> PRIOR FILING DATE: 2003-12-12

<150> PRIOR APPLICATION NUMBER: US 60/433,556
<151> PRIOR FILING DATE: 2002-12-13

<150> PRIOR APPLICATION NUMBER: US 60/438,466
<151> PRIOR FILING DATE: 2003-01-07

<160> NUMBER OF SEQ ID NOS: 5

<170> SOFTWARE: PatentIn version 3.1

<210> SEQ ID NO: 1
<211> LENGTH: 1335
<212> TYPE: DNA
<213> ORGANISM: Physcomitrella patens

<400> SEQUENCE: 1

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tgtgggtgct tgagagcggg gaataagctg gataaggacc aatttgtggg tgatgggaaa 180
ccacttatgc atcaacagac gcggggatgg agtcaggggc gggagaggtg tcacgcaggg 240
aggtctgtgg tgatggccag tatgagtggc gccaagatca aggtcattgg tgtaggcggc 300
gggggcaaca atgctgtgaa ccgcatgatt gggagcggca ttcagggtgt tgatttttgg 360
gccatcaaca cagatgttca agctttgcag aaatcacaag ccgaacatcg cgttcaaatc 420
ggcgaagctt tgacccgagg acttggtact ggtggaaagc cattccttgg agaacaagca 480
gcagaggaat cgatagaaat cattgcacag gcagtggtag atgctgatct tgtcttcatt 540
actgcgggca tgggtggtgg aacggggtct ggggctgccc cggtcgttgc ccgtgtggcc 600
aaagaggcag ggcaactcac tgttggtgtt gtcacttatc cgtttacgtt tgagggccgt 660
cggagaagcc agcaggcagt ggaggcaata gagaatctgc ggaagtctgt cgacagtctt 720
attgtcattc ctaatgaccg tctactcgat gtctccggag ataaaactcc tcttcaggaa 780
gcattttctc tagccgacga tgttcttagg cagggagttc aaggcatttc agacatcatc 840
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ggtacagcca tgcttggcgt tggctcctct agtggcaaga atcgtgctga ggaggccgct 960
gttcaagctg cttcagcccc tcttattgaa cgctctattg aacaagcaac tggcattgta 1020
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gtaacaggtt tagctgaccc ctcagctaat atcatttttg gagcggtagt ggatgacaaa 1140
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Input Set : A:\MBP-017xxSeqList.txt
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<210> SEQ ID NO: 2
<211> LENGTH: 1473
<212> TYPE: DNA
<213> ORGANISM: Physcomitrella patens
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agccaagtgc aatgccaacg ctttcgatgt ctatcttcag aatataaggg tcataatctt 180
aaacttagaa gacgtagccg tgtctcagct tccaacagag aaaacggtag tttaaatggg 240
cgtttccagg aatcactgag tcaagagaat gggtatccgg caccaactga agggactgat 300
cctcacactt tctccacggc gatggactcc ttagctatta aagcagagga agcttacaat 360
gacgtacagg attcttttgc caagagtagt aaacaacgga gcttatctgg ctgcgcttct 420
atcaaagtgt tcggtgtcgg gggtggtgga tgcaatgcgg tagacgaaat ggtgaggtca 480
gaactattga atgttgagtt ctgggccgtc aatactgaca aacaagcatt gaacaagtcg 540
ctggctccca ataaaattca aattggacag gacacgacag ccggccgcgg tgcaggtgga 600
agaagtgcaa ccggtgagga agcagctaca gagtcattgg cggagctttc gatggcactt 660
gaaggtgccg atttagtctt catcgcctcc ggtatgggtg gcggtactgg ttcaggagca 720
gctcctgtgg tggctcggtt ggcgaaggct atgggagcgt taacgattgg catagtaact 780
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aagaaccgtg ctgaggaggt ggcacggtca gccatcatgt ctcctctact ccgctccgtc 1140
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gtcaacatcg ctgccgaaat tgttcatgac atggctgatc caaacgcaaa tgttatcttt 1260
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tttagagagc ctggagagga gaaggtcgtt ggtagtgttc gaactgtaga cgatgatata 1380
ttctactggg aacagaataa gaataggtcc gaccttggca aagtgccgga cgttttgcga 1440
agaaaagatc gaaggcgtgg cagtggcagg taa 1473
<210> SEQ ID NO: 3
<211> LENGTH: 444
<212> TYPE: PRT
<213> ORGANISM: Physcomitrella patens
<400> SEQUENCE: 3
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1 5 10 15
Gly Ser Leu Cys Ser Thr Ser Pro Gln Ser Met His Pro Met Ser Ser
20 25 30
Val Ala Ala Lys Val Thr Arg Gln Cys Gly Cys Leu Arg Ala Gly Asn
35 40 45
Lys Leu Asp Lys Asp Gln Phe Val Gly Asp Gly Lys Pro Leu Met His
50 55 60
Gln Gln Thr Arg Gly Trp Ser Gln Gly Arg Glu Arg Cys His Ala Gly
65 70 75 80
Arg Ser Val Val Met Ala Ser Met Ser Gly Ala Lys Ile Lys Val Ile
85 90 95
Gly Val Gly Gly Gly Gly Asn Asn Ala Val Asn Arg Met Ile Gly Ser
100 105 110

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Input Set : A:\MBP-017xxSeqList.txt
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171 Gly Ile Gln Gly Val Asp Phe Trp Ala Ile Asn Thr Asp Val Gln Ala
172         115                 120                 125
175 Leu Gln Lys Ser Gln Ala Glu His Arg Val Gln Ile Gly Glu Ala Leu
176     130                 135                 140
179 Thr Arg Gly Leu Gly Thr Gly Gly Lys Pro Phe Leu Gly Glu Gln Ala
180 145                 150                 155                 160
183 Ala Glu Glu Ser Ile Glu Ile Ile Ala Gln Ala Val Val Asp Ala Asp
184                 165                 170                 175
187 Leu Val Phe Ile Thr Ala Gly Met Gly Gly Gly Thr Gly Ser Gly Ala
188             180                 185                 190
191 Ala Pro Val Val Ala Arg Val Ala Lys Glu Ala Gly Gln Leu Thr Val
192         195                 200                 205
195 Gly Val Val Thr Tyr Pro Phe Thr Phe Glu Gly Arg Arg Arg Ser Gln
196     210                 215                 220
199 Gln Ala Val Glu Ala Ile Glu Asn Leu Arg Lys Ser Val Asp Ser Leu
200 225                 230                 235                 240
203 Ile Val Ile Pro Asn Asp Arg Leu Leu Asp Val Ser Gly Asp Lys Thr
204                 245                 250                 255
207 Pro Leu Gln Glu Ala Phe Ser Leu Ala Asp Asp Val Leu Arg Gln Gly
208             260                 265                 270
211 Val Gln Gly Ile Ser Asp Ile Ile Thr Thr Pro Gly Leu Val Asn Val
212         275                 280                 285
215 Asp Phe Ala Asp Val Arg Ala Val Met Ser Asn Ser Gly Thr Ala Met
216     290                 295                 300
219 Leu Gly Val Gly Ser Ser Ser Gly Lys Asn Arg Ala Glu Glu Ala Ala
220 305                 310                 315                 320
223 Val Gln Ala Ala Ser Ala Pro Leu Ile Glu Arg Ser Ile Glu Gln Ala
224                 325                 330                 335
227 Thr Gly Ile Val Tyr Asn Ile Thr Gly Gly Pro Asp Leu Thr Leu Gln
228             340                 345                 350
231 Glu Val Asn Thr Val Ser Glu Ile Val Thr Gly Leu Ala Asp Pro Ser
232         355                 360                 365
235 Ala Asn Ile Ile Phe Gly Ala Val Val Asp Asp Lys Tyr Thr Gly Glu
236     370                 375                 380
239 Ile His Val Thr Ile Ile Ala Thr Gly Phe Ser His Ser Phe Gln Lys
240 385                 390                 395                 400
243 Ser Leu Val Asp Pro Asn Val Ser Arg Ser Glu Arg Gln Asp Ala Pro
244                 405                 410                 415
247 Ser Asn Ala Leu Glu Lys Pro Trp Lys Gln Pro Thr Pro Thr Ser Ser
248             420                 425                 430
251 Arg Phe Arg Gln Gly Leu Asn Ser Lys Gly Phe Leu
252         435                 440
255 <210> SEQ ID NO: 4
256 <211> LENGTH: 490
257 <212> TYPE: PRT
258 <213> ORGANISM: Physcomitrella patens
260 <400> SEQUENCE: 4
261 Met Ile Thr Cys Arg Val Trp Val Gly Leu Gly Pro Val Ser Pro Ser
262 1               5                   10                  15
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Input Set : A:\MBP-017xxSeqList.txt
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265 Leu Ile Leu Leu Pro Ser Lys Ser Asn Gly Glu Cys Val Leu Ser Ala
266             20                  25                  30
269 Arg Lys Ala Asp Trp Gly Leu Leu Ser Gln Val Gln Cys Gln Arg Phe
270         35                  40                  45
273 Arg Cys Leu Ser Ser Glu Tyr Lys Gly His Asn Leu Lys Leu Arg Arg
274     50                  55                  60
277 Arg Ser Arg Val Ser Ala Ser Asn Arg Glu Asn Gly Ser Leu Asn Gly
278 65                  70                  75                  80
281 Arg Phe Gln Glu Ser Leu Ser Gln Glu Asn Gly Tyr Pro Ala Pro Thr
282                 85                  90                  95
285 Glu Gly Thr Asp Pro His Thr Phe Ser Thr Ala Met Asp Ser Leu Ala
286             100                 105                 110
289 Ile Lys Ala Glu Glu Ala Tyr Asn Asp Val Gln Asp Ser Phe Ala Lys
290         115                 120                 125
293 Ser Ser Lys Gln Arg Ser Leu Ser Gly Cys Ala Ser Ile Lys Val Phe
294     130                 135                 140
297 Gly Val Gly Gly Gly Gly Cys Asn Ala Val Asp Glu Met Val Arg Ser
298 145                 150                 155                 160
301 Glu Leu Leu Asn Val Glu Phe Trp Ala Val Asn Thr Asp Lys Gln Ala
302                 165                 170                 175
305 Leu Asn Lys Ser Leu Ala Pro Asn Lys Ile Gln Ile Gly Gln Asp Thr
306             180                 185                 190
309 Thr Ala Gly Arg Gly Ala Gly Gly Arg Ser Ala Thr Gly Glu Glu Ala
310         195                 200                 205
313 Ala Thr Glu Ser Leu Ala Glu Leu Ser Met Ala Leu Glu Gly Ala Asp
314     210                 215                 220
317 Leu Val Phe Ile Ala Ser Gly Met Gly Gly Gly Thr Gly Ser Gly Ala
318 225                 230                 235                 240
321 Ala Pro Val Val Ala Arg Leu Ala Lys Ala Met Gly Ala Leu Thr Ile
322                 245                 250                 255
325 Gly Ile Val Thr Glu Pro Phe Thr Phe Glu Gly Phe Thr Arg Ala Arg
326             260                 265                 270
329 Gln Ala Arg Lys Ala Ile Glu Asp Met Arg His Ala Ala Asp Thr Val
330         275                 280                 285
333 Val Val Val Pro Asn Asp Arg Leu Leu Gln Thr Val Ala Pro Asp Thr
334     290                 295                 300
337 Ser Met Leu Glu Ala Phe His Leu Ala Asp Asp Val Leu Arg Gln Gly
338 305                 310                 315                 320
341 Val Gln Gly Ile Ser Asp Ile Ile Thr Ile Pro Gly Leu Val Asn Val
342                 325                 330                 335
345 Asp Phe Ala Asp Val Lys Ala Ile Met Ser Asn Ala Gly Ser Ala Met
346             340                 345                 350
349 Leu Gly Ile Ala Leu Val Leu Gly Lys Asn Arg Ala Glu Glu Val Ala
350         355                 360                 365
353 Arg Ser Ala Ile Met Ser Pro Leu Leu Arg Ser Val Ser Arg Pro Met
354     370                 375                 380
357 Gly Ile Val Tyr Asn Val Thr Gly Gly Ser Asp Leu Thr Leu His Glu
358 385                 390                 395                 400
361 Val Asn Ile Ala Ala Glu Ile Val His Asp Met Ala Asp Pro Asn Ala
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Input Set : A:\MBP-017xxSeqList.txt
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362                 405                 410                 415
365 Asn Val Ile Phe Gly Ala Val Ile Asp Glu Ser Phe Lys Gly Met Ile
366             420                 425                 430
369 Arg Met Thr Val Ile Ala Thr Gly Phe Arg Glu Pro Gly Glu Glu Lys
370         435                 440                 445
373 Val Val Gly Ser Val Arg Thr Val Asp Asp Asp Ile Phe Tyr Trp Glu
374     450                 455                 460
377 Gln Asn Lys Asn Arg Ser Asp Leu Gly Lys Val Pro Asp Val Leu Arg
378 465                 470                 475                 480
381 Arg Lys Asp Arg Arg Arg Gly Ser Gly Arg
382                 485                 490
385 <210> SEQ ID NO: 5
386 <211> LENGTH: 383
387 <212> TYPE: PRT
388 <213> ORGANISM: Physcomitrella patens
390 <400> SEQUENCE: 5
391 Met Asp Ser Leu Ala Ile Lys Ala Glu Glu Ala Tyr Asn Asp Val Gln
392 1               5                   10                  15
395 Asp Ser Phe Ala Lys Ser Ser Lys Gln Arg Ser Leu Ser Gly Cys Ala
396             20                  25                  30
399 Ser Ile Lys Val Phe Gly Val Gly Gly Gly Gly Cys Asn Ala Val Asp
400         35                  40                  45
403 Glu Met Val Arg Ser Glu Leu Leu Asn Val Glu Phe Trp Ala Val Asn
404     50                  55                  60
407 Thr Asp Lys Gln Ala Leu Asn Lys Ser Leu Ala Pro Asn Lys Ile Gln
408 65                  70                  75                  80
411 Ile Gly Gln Asp Thr Thr Ala Gly Arg Gly Ala Gly Gly Arg Ser Ala
412                 85                  90                  95
415 Thr Gly Glu Glu Ala Ala Thr Glu Ser Leu Ala Glu Leu Ser Met Ala
416             100                 105                 110
419 Leu Glu Gly Ala Asp Leu Val Phe Ile Ala Ser Gly Met Gly Gly Gly
420         115                 120                 125
423 Thr Gly Ser Gly Ala Ala Pro Val Val Ala Arg Leu Ala Lys Ala Met
424     130                 135                 140
427 Gly Ala Leu Thr Ile Gly Ile Val Thr Glu Pro Phe Thr Phe Glu Gly
428 145                 150                 155                 160
431 Phe Thr Arg Ala Arg Gln Ala Arg Lys Ala Ile Glu Asp Met Arg His
432                 165                 170                 175
435 Ala Ala Asp Thr Val Val Val Val Pro Asn Asp Arg Leu Leu Gln Thr
436             180                 185                 190
439 Val Ala Pro Asp Thr Ser Met Leu Glu Ala Phe His Leu Ala Asp Asp
440         195                 200                 205
443 Val Leu Arg Gln Gly Val Gln Gly Ile Ser Asp Ile Ile Thr Ile Pro
444     210                 215                 220
447 Gly Leu Val Asn Val Asp Phe Ala Asp Val Lys Ala Ile Met Ser Asn
448 225                 230                 235                 240
451 Ala Gly Ser Ala Met Leu Gly Ile Ala Leu Val Leu Gly Lys Asn Arg
452                 245                 250                 255
455 Ala Glu Glu Val Ala Arg Ser Ala Ile Met Ser Pro Leu Leu Arg Ser
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VERIFICATION SUMMARY DATE: 02/22/2006
PATENT APPLICATION: **US/10/538,530** TIME: 12:11:08

Input Set : **A:\MBP-017xxSeqList.txt**
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